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<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (use as many sheets as necessary)				Application Number	10/066,047
				Filing Date	1/31/02
				First Named Inventor	Steven Teig, et al.
				Group Art Unit	2822
				Examiner Name	Soward, Ida
Sheet	1	of	6	Attorney Docket Number	SPLX.P0078

U.S. PATENT DOCUMENTS						
Examiner* Initials	Cite No. <sup>1</sup>	U.S. Patent Document		Date of Publication MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code <sup>2</sup> (if known)			
	1.	2001/0003843	A1	06-14-2001	Scepanovic et al.	
	2.	2002/0024115	A1	02-28-2002	Ibnabdeljalil et al.	
	3.	2002/0174413	A1	11-21-2002	Tanaka	
	4.	2002/0182844	A1	12-05-2002	Igarashi et al.	
	5.	2003/0005399	A1	01-02-2003	Igarashi et al.	
	6.	2003/0025205	A1	02-06-2003	Shively	
	7.	2003/0121017	A1	06-26-2003	Andreev et al.	
	8.	4,615,011		09-30-1986	Linsker	
	9.	4,673,966		06-16-1987	Shimoyama	
	10.	4,700,016		10-13-1987	Hitchcock et al.	
	11.	4,782,193		11-01-1988	Linsker	
	12.	5,360,948		11-01-1994	Thornberg	
	13.	5,578,840		11-26-1996	Scepanovic et al.	
	14.	5,618,744		04-08-1997	Suzuki et al.	
	15.	5,633,479		05-27-1997	Hirano	
	16.	5,650,653		07-22-1997	Rostoker et al.	
	17.	5,657,242		08-12-1997	Sekiyama et al.	
	18.	5,742,086		04-21-1998	Rostoker et al.	
	19.	5,757,656		05-26-1998	Hershberger et al.	
	20.	5,777,360		07-07-1998	Rostoker et al.	
	21.	5,811,863		09-22-1998	Rostoker et al.	

Examiner Signature		Date Considered	5-20-04
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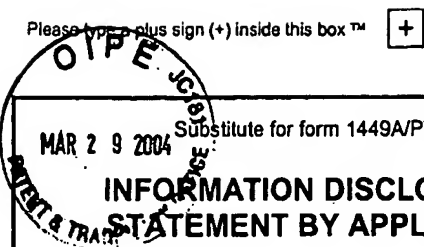
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				Group Art Unit	2822
				Examiner Name	Soward, Ida
Sheet	2	of	6	Attorney Docket Number	SPLX.P0078

U.S. PATENT DOCUMENTS						
22.	5,822,214		10-13-1998	Rostoker et al.		
23.	5,889,329		03-30-1999	Rostoker et al.		
24.	5,914,887		06-22-1999	Scepanovic et al.		
25.	5,973,376		10-26-1999	Rostoker et al.		
26.	6,035,108		03-07-2000	Kikuchi		
27.	6,067,409		05-23-2000	Scepanovic et al.		
28.	6,128,767		10-03-2000	Chapman		
29.	6,209,123	B1	03-27-2001	Maziasz et al.		
30.	6,226,560	B1	05-01-2001	Hama		
31.	6,262,487	B1	07-17-2001	Igarashi et al.		
32.	6,301,686	B1	10-09-2001	Kikuchi et al.		
33.	6,320,391	B1	11-20-2001	Bui		
34.	6,324,675	B1	11-27-2001	Dutta et al.		
35.	6,365,958	B1	04-02-2002	Ibnabdeljalil et al.		
36.	6,385,758	B1	05-07-2002	Kikuchi et al.		
37.	6,412,097	B1	06-25-2002	Kikuchi et al.		
38.	6,436,804	B2	08-20-2002	Igarashi et al.		
39.	6,483,481	B1	11-19-2002	Sievenpiper et al.		
40.	6,546,540	B1	04-08-2003	Igarashi et al.		
41.	6,586,281	B1	07-01-2003	Gabara et al.		
42.	6,615,400	B1	09-02-2003	Lukanc		
43.	6,645,842	B2	11-11-2003	Igarashi et al.		

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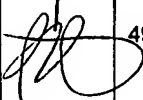
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Sheet	3	of	6	Attorney Docket Number	SPLX.P0078

FOREIGN PATENT DOCUMENTS								
Examiner <sup>*</sup> Initials	Cite No. <sup>1</sup>	Foreign Patent Document			Date of Publication MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
		Office <sup>3</sup>	Number <sup>4</sup>	Kind Code (if known) <sup>5</sup>				
	44.	JP	03-173471		07-26-1991	Tawada et al.	with Japanese Patent Office's English translation of Abstract; and with English translation of the application.	✓
	45.	JP	04-000677		01-06-1992	Fujiwara et al.	with English translation of Abstract;	
	46.	JP	05-102305		04-23-1993	Sato	with Japanese Patent Office's English translation of Abstract; and with English translation of the application.	✓
	47.	JP	05-243379		09-21-1993	Kubota	with Japanese Patent Office's English translation of Abstract; and with English translation of the application.	✓
	48.	JP	07-086407		03-31-1995	Miura	with Japanese Patent Office's English translation of Abstract; and with English translation of the application.	✓
	49.	JP	09-162279		06-20-1997	Yoshida	with Japanese Patent Office's English translation of Abstract; and with English translation of the application.	✓

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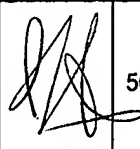
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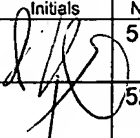
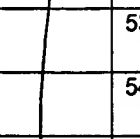
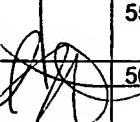
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				Examiner Name	Soward, Ida
Sheet	4	of	6	Attorney Docket Number	SPLX.P0078

FOREIGN PATENT DOCUMENTS							
	50.	JP	2000-082743		03-21-2000	Igarashi et al.	with Japanese Patent Office's English translation of Abstract; and with English translation of the application. ✓

NON PATENT LITERATURE DOCUMENTS				
Examiner* Initials	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.		† <sup>6</sup>
	51.	Berger, B. et al., Nearly Optimal Algorithms and Bounds for Multilayer Channel Routing, Journal of the Association for Computing Machinery, pp. 500-542, March 1995.		
	52.	Chen, H., Routing L-Shaped Channels in Nonslicing-Structure Placement. 24 <sup>th</sup> ACM-IEEE Design Automation Conference, pp. 152-165, 1987.		
	53.	Cheng, K. et al., Manhattan or Non Manhattan? A Study of Alternative VLSI Routing Architectures, pp 47-52, 2000.		
	54.	Chiang, C. et al., Wirability of Knock-Knee Layouts with 45° Wires, IEEE Transactions on Circuits and Systems, Vol. 38, Issue 6, pp 613-624, June 1991.		
	55.	NN71091316, Use of Relatively Diagonal And Rectangular Wiring Planes n Multilayer Packages, September 1971, IBM Technical Disclosure Bulletin, Vol. No. 14, Issue No. 4, pp. 1316-1317.		
	56.	Overtone, G., EDA Underwriter 2 Finding Space in a Multi-Layer Board, Electronic Engineering, Morgan-Gramplan LTD, vol. 67, no. 819, pp 29-30.		

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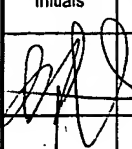
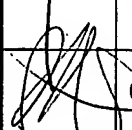
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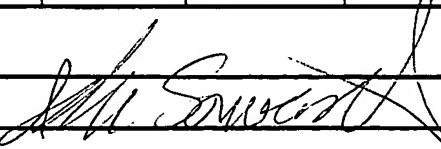


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				<b>Examiner Name</b>	Soward, Ida
<b>Sheet</b>	5	<b>of</b>	6	<b>Attorney Docket Number</b>	SPLX.P0078

RELATED U.S. PATENT APPLICATIONS						
Examiner Initials	Cite No. <sup>1</sup>	U.S. Patent Application		Name of Patentee or Applicant of Cited Document	Date of Filing MM-DD-YYYY	Related Application Data
		Serial Number	Attorney Docket Number			
	57.	10/066,060	SPLX.P0072	Steven Teig	01-31-2002	Application with the same specification and drawings as the present application, with the exception of summary and abstract.
	58.	10/066,160	SPLX.P0073	Steven Teig et al.	01-31-2002	Application with the same specification and drawings as the present application, with the exception of summary and abstract.
	59.	10/066,095	SPLX.P0074	Steven Teig et al.	01-31-2002	Application with the same specification and drawings as the present application, with the exception of summary and abstract.
	60.	10/061,641	SPLX.P0079	Steven Teig et al.	01-31-2002	Application with the same specification and drawings as the present application, with the exception of summary and abstract.
	61.	10/066,094	SPLX.P0080	Steven Teig et al.	01-31-2002	Application with the same specification and drawings as the present application, with the exception of summary and abstract.
	62.	10/076,121	SPLX.P0081	Steven Teig	02-12-2002	Application with similar, but not identical, specification and drawings as the present application.
	63.	10/062,995	SPLX.P0105	Steven Teig et al.	01-31-2002	Application with the same specification and drawings as the present application, with the exception of summary and abstract.
	64.	10/066,102	SPLX.P0106	Steven Teig	01-31-2002	Application with the same specification and drawings as the present application, with the exception of summary and abstract.
	65.	10/066,187	SPLX.P0133	Steven Teig et al.	01-31-2002	Application with the same specification and drawings as the present application, with the exception of summary and abstract.
	66.	10/233,202	CDN.P0008	Steven Teig	08-28-2002	Per the preliminary amendment dated 5/30/03, this application is a CIP of the present application.

<b>Examiner Signature</b>		<b>Date Considered</b>	5-20-04
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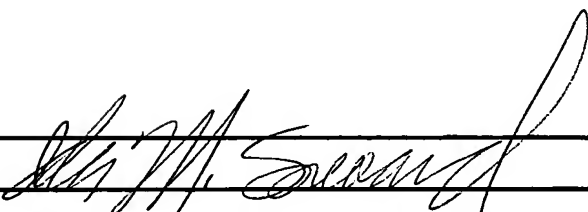
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Sheet	6	of	6	Attorney Docket Number	SPLX.P0078

RELATED U.S. PATENT APPLICATIONS					
67.	10/229,196	CDN.P0009	Steven Teig	08-26-2002	Per the preliminary amendment dated 5/30/03, this application is a CIP of the present application.
68.	10/288,870	CDN.P0010	Steven Teig	11-06-2002	Per the preliminary amendment dated 5/30/03, this application is a CIP of the present application.
69.	10/219,923	CDN.P0011	Steven Teig	08-14-2002	Per the preliminary amendment dated 5/30/03, this application is a CIP of the present application.

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